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MANCHESTER DIGITAL CAMPUS

Environmental Statement
Volume 2 - Chapter 8: Biodiversity

NOVEMBER 2024

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Executive Summary

Considering biodiversity in an environmental statement is crucial because it helps identify and evaluate the potential impacts of a development project on local ecosystems and wildlife. This assessment ensures that any adverse effects on biodiversity are identified, allowing for the implementation of mitigation measures to protect and enhance natural habitats.

The baseline ecological value of the Site is relatively low, with the area predominantly consisting of hardstanding and scattered vegetation of limited ecological significance. Key features include introduced shrub, a mix of native and non-native trees, and the adjacent Rochdale Canal, which is likely of county importance. Additionally, urban managed greenspaces associated with Cotton Field Park are also of county importance. While the Site itself holds limited ecological value, the surrounding areas contributes to local biodiversity.

The Manchester Digital Campus will result in the loss of some existing habitats, including urban trees and scattered vegetation. During construction, without mitigation, there is a risk of dust and water pollution, which could affect nearby waterbodies like the Rochdale Canal. No significant populations of breeding birds or bats were found on-Site.

The impact on protected species is expected to be minimal due to the urban nature of the Site, but measures will be taken to protect any wildlife that might be present.

Environmental resources such as the Rochdale Canal could be affected by pollution from construction activities without mitigation, but best practice measures will be adhered to in order to prevent this. New trees and shrub planting will be incorporated into the design to compensate the loss of urban trees.

To mitigate these effects, best practices will be followed to prevent dust and water pollution. Bird and bat boxes will be installed to provide new habitats, and 73 native trees will be planted to improve local biodiversity.

8. Biodiversity

8.1. Introduction

8.1.1. This chapter of the Environment Statement (ES) assesses the likely ecological effects of the Proposed Development. It outlines the assessment methodology, describes the existing baseline conditions, identifies potential impacts and provides an assessment of effects. The chapter also details the mitigation measures necessary to prevent, reduce, or offset any significant adverse effects, and discusses the likely residual effects after these measures have been implemented.

8.1.2. This chapter reports on two different types of cumulative effects: intra-project cumulative effects, which are the combined effects of individual topic impacts on a particular sensitive receptor; and inter-project cumulative effects, which consider the way in which the Proposed Development may give rise to impacts in combination with other developments the study area, termed Reasonably Foreseeable Future Projects (RFFPs). The outlined cumulative effects are then used to inform the overall assessment of cross-topic cumulative effects, which is reported in ES (Volume 2) Chapter 22: Cumulative Effects.

8.1.3. This chapter is supported by a technical appendix contained within ES Volume 4 and figures contained within ES Volume 5, which include the following:

- ES (Volume 4) Appendix 8.1 – Target Notes and photographs
- ES (Volume 4) Appendix 8.2 – Biodiversity Net Gain Assessment
- ES (Volume 4) Appendix 8.3 – Arboricultural Impact Assessment
- ES (Volume 5) Figure 8.1 – UKHab baseline plan and Target Notes
- ES (Volume 5) Figure 8.2 – Biodiversity Net Gain baseline habitat plan
- ES (Volume 5) Figure 8.3 – UKHab post development plan

8.2. Competent expert evidence

8.2.1. This ecological assessment has been undertaken and reviewed by:

- An Associate Ecologist who is a Chartered Ecologist (CEcol) and who holds full professional membership with the Chartered Institute of Ecological and Environmental Management (CIEEM). They have over ten years of knowledge and experience in undertaking ecological assessments and have used their knowledge and professional judgement to undertake this assessment.
- An Associate Ecologist who holds full professional membership with CIEEM. They have over 20 years of knowledge and experience in ecological assessments and have used their knowledge and professional judgement to undertake a technical review of this assessment.

8.3. Relevant legislation and guidance

8.3.1. Table 8-1, below, summarises the legislation and regulations applicable to biodiversity.

Table 8-1 - Key legislation and guidance for biodiversity

Legislation/regulation	Summary of requirements
National	
National Planning Policy Framework (NPPF)[1] December 2023	The NPPF sets out the Government's planning policies for England and provides a framework within which the appropriate local authority can produce local and neighbourhood plans; the NPPF is a material consideration in making planning decisions. Key guidance on biodiversity is in Chapter 15 (Conserving and enhancing the natural environment). Paragraph 180 states that "*Planning policies and decisions should contribute to and enhance the natural and local environment by*": ▪ Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan). ▪ Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. Paragraph 185 builds on this by stating that plans should protect and enhance biodiversity through the identification, mapping and safeguarding of "*components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation*". Furthermore, plans should "*promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity*". Paragraph 186 provides the following principles that local planning authorities should follow when determining planning applications: ▪ If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused. ▪ Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest.

[1] Department for Levelling Up, Housing & Communities. National Planning Policy Framework. DLUHC, December 2023. Available at: National Planning Policy Framework - Guidance - GOV.UK (www.gov.uk)

Legislation/regulation	Summary of requirements
	▪ Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists. ▪ Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.
The Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations)	The Habitats Regulations transpose into UK law the Habitats Directive (Council Directive 92/43/EEC) and the Wild Birds Directive (Directive 2009/147/EC), i.e. the Nature Directives). The Habitats Regulations offer protection to a number of plant and animal species via the designation of Special Areas of Conservation (SAC) and Special Protection Areas (SPA). The Regulations also offer protection to a number of 'European Protected Species' (EPS). The Habitats Regulations were amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 in light of the UK's withdrawal from the European Union. The amendment does not make any substantive changes to the protection of SACs, SPAs or species classed as EPS as protected under the Habitats Regulations. It does however change the nomenclature of the protected sites network within the UK. The Natura 2000 site network, comprising SPAs, SACs and Ramsar sites is now titled the National Sites Network within the UK. The National Sites Network does not include Ramsar sites; however, it is noted that many Ramsar sites overlap with SAC and SPA sites and all Ramsar sites continue to be protected in the same way as SACs and SPAs.
Wildlife & Countryside Act (WCA) 1981 (as amended)	The Act consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and the Wild Birds Directive in Great Britain. The Act gives protection to: ▪ Wild birds (including special protection from disturbance for birds listed on Schedule 1 of the Act). ▪ Wild animals listed on Schedule 5 of the Act. ▪ Wild plants listed on Schedule 8 of the Act. The Act contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of animals and planting of plants listed in Schedule 9 of the Act. The Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) – these sites are identified for their flora, fauna, geological or physiographical features. The Act also contains measures for the protection and management of SSSIs. The Act provides for the declaration of National Nature Reserves (NNRs) by the statutory country conservation agencies. NNRs contain examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats or to provide special opportunities for scientific study of the habitats communities and species represented within them.
Natural Environment & Rural Communities	Section 40 of The NERC Act 2006 places a duty on every public authority, in exercising its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

Legislation/regulation	Summary of requirements
(NERC) Act 2006 (as amended)	Under Section 41 of the Act, the Secretary of State must, in consultation with Natural England, must publish a list of the living organisms and types of habitat which, in the Secretary of State's opinion, are of principal importance for the purpose of conserving biodiversity in England, i.e. the S.41 list. All planning decisions must be made with regard for the conservation of Habitats of Principal Importance (HoPI) and Species of Principal Importance (SoPI).
Countryside and Rights of Way (CRoW) Act 2000	The CRoW Act 2000 increases measures for the management and protection for SSSIs and strengthens wildlife enforcement legislation.
Protection of Badgers Act (1992)	This Act lists activities and behaviours which constitute an offence in relation to badgers (Meles meles) in order to support the conservation and welfare of this historically persecuted species. The Act consolidates the Badgers Act 1973, the Badgers Act 1991 and the Badgers (Further Protection) Act 1991.
Hedgerows Regulation (1997)	These regulations set out criteria for determining whether hedgerows are 'important' and subsequently control the removal of 'important' hedgerows through a system of notification.
National Parks and Access to the Countryside Act 1949	Under this Act, Local Nature Reserves (LNRs) may be declared by local authorities after consultation with the relevant statutory nature conservation agency. LNRs are declared and managed for nature conservation, and provide opportunities for research and education, or simply enjoying and having contact with nature. The Act (in addition to the Wildlife and Countryside Act 1981 (as amended)) provides for the declaration of NNRs by the statutory country conservation agencies.
The Invasive Alien Species (Enforcement and Permitting) Order 2019	The Enforcement Order requires management measures to be put in place for 14 widespread invasive alien species. These management measures seek to minimise the effect these species have on biodiversity, related ecosystem services, human health and the economy.
Environment Act 2021	The Act creates a post Brexit framework to protect and enhance the natural environment. Through amendments to the Town and Country Planning Act 1990, the Act will require all planning permissions in England to be granted subject to a new general pre-commencement condition that requires approval of a biodiversity net gain plan. This will ensure the delivery of a minimum of 10% measurable biodiversity net gain. The key tool to calculate this will be the Defra Statutory Metric. Works to deliver biodiversity net gain can be carried out either onsite or offsite or through the purchase of 'biodiversity credits' from the Secretary of State. Both onsite and offsite mitigation must be maintained for at least 30 years after development.
Regional and Local	
Manchester's Core Strategy 2012 – 2027[2]	Policy EN 15 Biodiversity and Geological Conservation states: *"The Council will seek to maintain or enhance sites of biodiversity and geological value throughout the City. Particular consideration will be given to:* • *sites with international or national designations for their biodiversity value. Manchester contains one Site of Special Scientific Interest (SSSI) (Cotteril Clough); there is a Special Area of Conservation (SAC) and an SSSI just over the border in Oldham (both on the Rochdale Canal within Oldham);*

[2] Core Strategy 2012-2027 | Core Strategy 2012-2027 | Manchester City Council

Legislation/regulation	Summary of requirements
	• *other sites of biodiversity value, including Sites of Biological Importance (SBIs) and Local Nature Reserves (LNRs); Manchester currently has 35 SBIs (including the Rochdale and Ashton Canals) and 7 LNRs; priority habitats found within Manchester,* • *as listed in the Manchester Biodiversity Strategy and included in the Greater Manchester Biodiversity Action Plan (GM BAP);* • *protected and priority species, as listed in the Manchester Biodiversity Strategy and included in the Greater Manchester Biodiversity Action Plan (GM BAP);* • *sites that are recognised for their geological importance;* • *the Council's objective to protect and conserve the City's existing trees and woodlands and the aim for a net increase in trees across the City* *Developers will be expected to identify and implement reasonable opportunities to enhance, restore or create new biodiversity, either on-site or adjacent to the site, contributing to linkages between valuable or potentially valuable habitat areas where appropriate, with reference to:* • *the Manchester Biodiversity Strategy, which provides further details of priority habitats within Manchester and opportunities for biodiversity enhancement including corridors such as the Mersey, Medlock and Irk river valleys, the canals and disused railway lines and areas of managed greenspace particularly in parks;* • *the Green Infrastructure Framework for Greater Manchester, which encompasses an ecological framework that seeks to guide and inform habitat creation and repair including identifying large 'biodiversity opportunity areas' including the Moston Brook Corridor and Nutsford Vale;* • *the Open Space, Sport & Recreation Study, which identifies areas where there is a deficit of natural and semi-natural greenspace, opportunities for green corridors and other linkages; Manchester's Climate Change Action Plan; the Strategic Flood Risk Assessment (SFRA) for Manchester; the Habitats Regulations Assessment (HRA) for Manchester, which gives detailed consideration to Special Areas of Conservation (SACs), including the Rochdale Canal SAC just outside the district boundary; the River Basin Management Plan for the North West; the Manchester Tree Strategy.* *Any adverse impacts on biodiversity will need to be justified against the wider benefits of the proposal, assessed against other LDF policies. Where adverse impacts are unavoidable, developers will be required to provide appropriate mitigation and/or compensation."*
Places For Everyone Joint Development Plan Document for Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan 2022 To 2039 Adopted 21 March 2024[3]	<u>Policy JP-G7 states:</u> We will work to deliver the aims and objectives of the Greater Manchester Tree and Woodland Strategy, aiming to significantly increase tree cover, protect and enhance woodland, and connect people to the trees and woodland around them. This will be done through local planning and associated activities such as: 1. Protecting and expanding the mosaic of woodland habitats, linking fragmented areas of woodland, in particular wooded cloughs and pockets of ancient and riverside (riparian) woodland;

[3] Available at: Places for Everyone Joint Development Plan Document (greatermanchester-ca.gov.uk)

Legislation/regulation	Summary of requirements
	2. Encouraging habitat diversity through conserving and managing existing woodland and trees that are of heritage, cultural and/or aesthetic value, including ancient woodland and veteran trees; 3. Aiming to plant a tree for every resident in the plan area over the next 25 years as part of the City of Trees initiative; 4. Targeting tree-planting at the areas of greatest need where the green infrastructure benefits can be maximised, whilst avoiding the loss of, or harm to, other priority habitats, including encouraging woodland planting schemes on areas of low-grade agricultural land and land in need of remediation; 5. Establishing a new City Forest Park in Salford, Bolton and Bury, which will provide a vast urban forest close to the City Centre; 6. Considerably increasing the provision of street trees within urban areas; 7. Promoting the provision of community orchards to increase fruit consumption; 8. Promoting the opportunity for woodland conservation to raise awareness for the sustainable use of timber; 9. Securing a diversification of broadleaved species, in order to increase biodiversity and disease resilience; 10. Improving public access to woodland and trees particularly by sustainable travel models to capture the health and wellbeing benefits whilst managing the associated pressures; 11. Encouraging the positive management of woodland to bring it into a more productive state, improve habitat diversity, and more effectively contribute to important green infrastructure functions such as flood risk management, urban cooling and carbon storage/sequestration; And through development as follows: 12. Where development would result in the loss of existing trees, requiring replacement on the basis of two new trees for each tree lost, or other measures that would also result in a net enhancement in the character and quality of the treescape and biodiversity value in the local area, with a preference for on-site provision; and 13. Protecting trees and woodland during the construction phase of development. <u>Policy JP-G8 states:</u> Through local planning and associated activities a net enhancement of biodiversity resources will be sought, including, where relevant, by: 1. Increasing the quality, quantity, extent and diversity of habitats, particularly priority habitats identified in national or local biodiversity action plans and those that support priority species; 2. Improving connections between habitats, to protect and enhance the provision of corridors, ecological networks (including Nature Recovery Networks) and steppingstones that enable the movement of species, especially as the climate changes; 3. Enhancing the management of existing habitats, including through habitat restoration, avoiding habitat fragmentation and combating invasive species; 4. Protecting sites designated for their nature conservation and/or geological importance, with the highest level of protection given to international and then national designations; 5. Facilitating greater access to nature, particularly within urban areas;

Legislation/regulation	Summary of requirements
	6. Supporting the development and implementation of the Great Manchester Wetlands Nature Recovery Network; and 7. Safeguarding, restoring and sustainably managing our most valuable soil resources, tackling soil degradation/erosion and recovering soil fertility, particularly to ensure protection of peat-based soils and safeguard 'best and most versatile' agricultural land. Development will be expected to: a. Follow the mitigation hierarchy of: i. Avoiding significant harm to biodiversity, particularly where it is irreplaceable, through consideration of alternative sites with less harmful impacts, then ii. Adequately mitigating any harm to biodiversity, then iii. Adequately compensating for any remaining harm to biodiversity b. Avoid fragmenting or severing connectivity between habitats; c. Achieve a measurable net gain in biodiversity of no less than 10% d. Make appropriate provision for long-term management of habitats and geological features connected to the development; e. Where appropriate, development should: mitigate air pollution impacts on Manchester Mosses SAC; mitigate urban edge, functionally linked land and recreation disturbance impacts on the South Pennine Moors SAC/SPAs; and assess and potentially mitigate boat movement, water pollution, and light spillage and shading impacts on the Rochdale Canal SAC; and f. Development proposals should be informed by the findings and recommendations of the appropriate biodiversity/ecological assessment(s) in the PfE evidence base and/or any updated or appropriate biodiversity/ecological assessments submitted as part of the planning application process.
The Greater Manchester Biodiversity Action Plan (GM BAP)[4]	The overall aim of the GM BAP is "*To promote the conservation, protection and enhancement of biological diversity in Greater Manchester for current and future generations*". Habitat Action Plans included in the GM BAP are: ▪ Grasslands ▪ Hedgerows ▪ Lowland mosslands ▪ Reedbeds and bittern ▪ Ponds and lodges ▪ Canals ▪ Native woodlands ▪ Uplands ▪ Urban managed greenspace Species Action Plans included in the GM BAP are: ▪ Bats ▪ Black redstart ▪ Farmland birds ▪ Great crested newts ▪ Hares ▪ Native black popular

[4] GMLRC Projects - Greater Manchester Biodiversity Action Plan

Legislation/regulation	Summary of requirements
	▪ Twite ▪ Water vole ▪ Willow tit
The 'Biodiversity Strategy 2022 – 2030: The City of Manchester's Nature Recovery' [5]	Highlights the ambition to improve nature in Manchester by the following: ▪ Increase the scale of practical action to protect and recover habitats throughout the city. ▪ Make smarter, evidence-based decisions on practical and policy actions to protect and recover nature in Manchester. ▪ Increase our understanding of the ecology and species diversity in our city.

8.3.2. Table 8-2 below summarises the technical standards and guidance applicable to biodiversity.

Table 8-2 - Technical standard and guidance for biodiversity

Technical standards/guidance	Summary of requirements
Guidelines for Ecological Impact Assessment in the UK and Ireland (2018)[6]	The aim of the guidelines is to: ▪ Promote good practice. ▪ Promote a scientifically rigorous and transparent approach to Ecological Impact Assessment (EcIA). ▪ Provide a common framework to EcIA in order to promote better communication and closer cooperation between ecologists involved in EcIA. ▪ Provide decision-makers with relevant information about the likely ecological effects of a project.
British Standard BS 42020:2013 Biodiversity Code of practice for planning and development	BS 42020:213 is a standard developed in association with biodiversity experts and stakeholders from across all sectors. The standard provides clear recommendations and guidance to ensure that actions and decisions taken at each stage of the planning process are informed by sufficient and appropriate ecological information.

8.4. Assessment methodology

Zone of Influence

8.4.1. The Zone of Influence (ZoI) is defined as the area over which ecological features may be affected by biophysical changes as a result of the Proposed Development and associated activities. The size and shape of the ZoI will depend on the ecological features present at the Site and the nature of the proposals and predicted impacts. The ZoI typically extends beyond a project's boundaries (for example where there are ecological or hydrological links beyond site boundaries), and takes into account both on-site impacts, and impacts that may occur to adjacent and/or more distant ecological features. In order

[5] Biodiversity Strategy 2022-2030 The City of Manchester's Nature Recovery

[6] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester.

to determine the ZoI, the size, location, and nature of a project needs to be considered alongside the likely impacts, sensitivities of ecological features, and potential for in combination effects.

Survey/Study Area

8.4.2. The 'Survey Area' includes all land within the Site and land up to 50 m from the Site where access was allowed. An additional 'Study Area' is also included from the Site which varies according to the target feature, species, or species group being surveyed.

8.4.3. The geographical area for obtaining ecological data through desk studies has been determined using professional judgement. The Study Areas used are outlined within Table 8-3.

Table 8-3 - Study Area buffers

Data type	Study area – distance from the Site
Statutory designated sites for nature conservation[7]	2 km
Irreplaceable habitats[8] and priority habitats[9]	2 km
Non statutory designated sites for nature conservation	1 km
Protected and priority species[9]	1 km (extended to 2 km for bats)

Data collection

Desk study and consultation

8.4.4. Baseline data have been gathered from a range of sources through data requests, consultation, and using online resources as outlined below. This included data gathering in relation to statutory and non-statutory designated sites for nature conservation, priority habitats[9], and protected and priority species[9]. The Study Areas used for the data gathering are detailed in Table 8-3 above. Greater Manchester Local Records Centre (GMLRC) data was received on 23 July 2023 for the Proposed Development which provided desk study data, including details of protected and priority species and non-statutory designated sites for nature conservation to inform the early design. The desk study was then undertaken on 24 January 2024.

[7] This includes Special Protection Areas (SPA), Special Areas of Conservation (SAC), Ramsar sites, National Nature Reserves (NNR), and Local Nature Reserves (LNR). In addition potential SPAs, candidate SACs/SPAs, and proposed Ramsar sites are included.

[8] As defined within the NPPF (2023) "*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen*."

[9] As set out in Box 1 on page 4 of the CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester, priority habitats and species include those listed as a national priority for conservation (i.e. a Habitat of Principle Importance or Species of Principle Importance in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (as amended) and/or local priority for conservation (e.g. in the local Biodiversity Action Plan (BAP)), International Union for the Conservation of Nature (IUCN) Red List or Amber List, Nationally Rare or Nationally Scarce, or endemic to a country or geographic location.

8.4.5. For species records collected, only those within ten years of the data collection date have been considered within the assessment.

8.4.6. The following online resources were accessed:

- Magic Map[10]; and
- The Woodland Trust's Ancient Tree Inventory[11].

8.4.7. Ordnance Survey maps and the Grid Reference Finder website[12] were used to identify the presence of waterbodies within 500 m of the Site, in order to establish if the land within and immediately surrounding the Site could be used as terrestrial habitat for great crested newts. This species typically uses suitable terrestrial habitat up to 500 m from a breeding pond. However, there is a notable decrease in great crested newt abundance beyond a distance of 250 m from a breeding pond[13].

Planning policy review

8.4.8. A review of national and local planning policy (as highlighted in Table 8-1) relevant to the Proposed Development was undertaken as part of the data gathering.

Ecological field surveys

8.4.9. The geographical area for undertaking ecological field surveys has been determined using current survey guidance, professional judgement, and the ZoI, which have been determined based on the nature of the impacts arising from the Proposed Development.

Field surveyor competencies

8.4.10. All the field surveys were led by surveyors who have been assessed[14] to be at least of capable experience following the CIEEM competency framework[15]. Surveys were led by surveyors with a Field Identification Skills Certificate (FISC) Level 4[16]. As set out in the FISC Botanical Field Skills Pyramid[17], a Level 4 certified surveyor has sufficient plant identification skills to survey a site for vascular plants, grasses, sedges, and ferns and is competent to undertake National Vegetation Classification surveys.

Walkover survey

8.4.11. An ecological walkover survey of areas within and adjacent to the Site, including land up to 50 m from the Site where access was allowed (the Survey Area), was undertaken on 13 July 2023 and updated on 10 April 2024.

[10] https://magic.defra.gov.uk/magicmap.aspx [Accessed: 24/01/2024]

[11] https://ati.woodlandtrust.org.uk/ [Accessed: 24/01/2024]

[12] https://gridreferencefinder.com [Accessed: 24/01/2024]

[13] Natural England (2004) An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (ENRR576). http://publications.naturalengland.org.uk/publication/134002

[14] Assessment undertaken by Atkins ecological technical leadership team in accordance with CIEEM competency criteria.

[15] https://www.cieem.net/competency-framework [Accessed: 24/01/2024]

[16] FISC-Information-Booklet-2023-Final-updated-7-July-2023-marking-tables.pdf (bsbi.org)

[17] Available at: https://bsbi.org/wp-content/uploads/dlm_uploads/2021/05/FISC-booklet-2021.pdf [Accessed 15/05/2024]

8.4.12. Habitats were mapped using the UK Habitat Classification (UKHab) v2.0 system[18]. UKHab is a comprehensive and hierarchical habitat classification system for the UK that has been developed to benefit from recent changes in habitat categorisation, recording and analysis, and is suitable for digitally recording in the field using GIS. It is fully compatible with other major existing classifications, including priority habitat types and Habitats Directive Annex I habitat types[19].

8.4.13. All habitats were recorded to at least Level 3 of the UKHab hierarchy, i.e. broad habitats such as neutral grassland or dense scrub. Any Level 4 habitats and Level 5 habitats have also been recorded. In addition, 'Essential Secondary Codes' have been recorded to describe habitat mosaics, complexes and their origins. All habitat features have been digitally mapped, using QGIS, as either polygons, lines, or points and assigned to a UKHab Primary Habitat Code.

8.4.14. An assessment of the possible presence of priority habitats[9] was also undertaken during the walkover survey.

8.4.15. Vascular plant names recorded during the survey followed Stace[20].

8.4.16. Target notes (TN), ES (Volume 4) Appendix 12.1 were used to record specific details on the plant species composition of the habitats, current management, and quality. TNs were also used to record features of ecological importance (e.g. ponds, veteran trees, and complex habitat mosaics).

8.4.17. In addition to mapping the habitats within the Survey Area, the survey also included an assessment of the possible presence of protected or priority species. This included recording any incidental sightings or field signs from such species.

8.4.18. The survey comprised assessing the suitability of the habitats present for, and recording any evidence of the following species (in line with good practice guidance available at the time of the survey):

- Badgers[21];
- Bats[22];
- Otters[23,24];
- Water voles[25];
- Breeding and non-breeding (wintering and passage) birds[26];
- Reptiles[27];

[18] UKHab Ltd (2023). *UK Habitat Classification Version 2.0 (at https://ukhab.org/)*

[19] Council Directive 92/43/EEC (1992) on the conservation of natural habitats and of wild fauna and flora (known as the 'Habitats Directive').

[20] Stace (2019) *New Flora of the British Isles* 4th edition.

[21] Harris S., Cresswell P. and Jefferies D. (1989) *Surveying badgers*. Mammal Society – No9.

[22] Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*. The Bat Conservation Trust, London.

[23] Chanin and Smith (2003). *Monitoring the otter Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No 10. Peterborough, English Nature.

[24] Liles G. (2003). *Otter Breeding Sites. Conservation and Management*. Conserving Natura 2000 Rivers Conservation Techniques Series No. 5. English Nature, Peterborough.

[25] Dean, M. et al (2016) *The Water Vole Mitigation Handbook*. Mammal Society.

[26] Bird Survey & Assessment Steering Group. (2022). *Bird Survey Guidelines for assessing ecological impacts, v.0.1.7*. Available at: https://birdsurveyguidelines.org [Accessed: 24/01/2024]

[27] Froglife (1999) *Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard* conservation. Froglife advice sheet 10.

- Amphibians (terrestrial and aquatic habitats), including an assessment of aquatic habitat for its suitability to support great crested newts using the Habitat Suitability Index (HSI) assessment[28];
- White-clawed crayfish[29];
- Freshwater pearl mussel[30];
- Priority invertebrates[31,32]; and
- Priority plants[33] and fungi [34].

8.4.19. Evidence of the presence of the following invasive species was recorded where seen:

- Evidence of animal species as listed on the Invasive Alien Species (Enforcement and Permitting) Order 2019; muntjac deer and grey squirrel.
- Evidence of the presence of the following invasive species: Japanese knotweed, giant knotweed, hybrid knotweed[35], giant hogweed, Himalayan balsam, rhododendron[36], New Zealand pigmy weed, Virginia creeper[37], variegated yellow archangel, and cotoneaster species[38]. These are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) and subject to strict legal control.

Further surveys

8.4.20. A detailed Preliminary Bat Roost Assessment (PBRA) survey of a single structure (a single storey brick-built security building) at the Site was undertaken on the 13 September 2022 and updated 30 September 2024. The lead surveyor held a Class 2 Natural England bat survey licence and was assessed to be at least of capable competency for bats following the CIEEM competency framework[39].

8.4.21. The PBRA involved a detailed visual examination of the structure, which was undertaken from ground level, during daylight hours, and aided with the use of binoculars, an endoscope, and a bright torch.

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[28] Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000) *Evaluating the suitability of habitat for the Great Crested Newt* (*Triturus cristatus*) Herpetological Journal 10 (4), 143-155 (2000).

[29] Peay S. (2003) *Monitoring the White-clawed Crayfish Austropotamobius pallipes.* Conserving Nature 2000 Rivers Monitoring Series No. 1. English Nature, Peterborough.

[30] NatureScot (2018) *Freshwater pearl mussel survey protocol - for use in site-specific projects*. Available at: https://www.nature.scot/doc/freshwater-pearl-mussel-survey-protocol-use-site-specific-projects [Accessed: 24/01/2024]

[31] Buglife, Good planning practice for invertebrates: Surveys. Available at: https://cdn.buglife.org.uk/2019/07/Good-practice-planning-surveys.pdf [Accessed: Accessed: 29/01/2024]

[32] English Nature, Organising surveys to determine site quality for invertebrates. Available at: https://publications.naturalengland.org.uk/publication/69045 [Accessed: 24/01/2024]

[33] Hill, D.A. ed., 2005. Handbook of biodiversity methods: survey, evaluation and monitoring. Cambridge University Press.

[34] At the present time there is no current survey guidance for fungi. However, the SSSI selection guidelines for non-licenced fungi provide some survey methodologies for some groups. Available at: https://hub.jncc.gov.uk/assets/d1fcb171-8086-4f5b-ade5-a34c5edc78c5. [Accessed: 24/01/2024]

[35] Hybrid knotweed species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) include *Fallopia japonica* x *Fallopia sachalinensis*

[36] Although there are approximately 1,200 species of rhododendron, just one species and one of its hybrids are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended): *Rhododendron ponticum* and *Rhododendron ponticum x Rhododendron maximum*.

[37] Virginia creeper species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) include *Parthenocissus quinquefolia* and *Parthenocissus inserta*

[38] There are approximately 100 species of cotoneaster found in the UK, but only five are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended): *Cotoneaster horizontalis*, *Cotoneaster integrifolius*, *Cotoneaster simonsii*, *Cotoneaster bullatus* and *Cotoneaster microphyllus*.

[39] https://cieem.net/resource/competency-framework/ [Accessed: 24/01/2024]

8.4.22. The survey involved the identification of potential entry/exit points for bats or other potential roost features (PRFs) such as holes in brickwork, cracks, and gaps in masonry. Based on the location, aspect, orientation, and characteristics of the features identified, the structure was assigned a potential suitability value for bats. The assessment of potential suitability assigns each structure either negligible, low, moderate, or high suitability for roosting bats.

Identifying important ecological features

8.4.23. A number of criteria have become accepted as a means of assessing the nature conservation importance of a feature which are set out in A Nature Conservation Review[40] and include diversity, rarity, and naturalness.

8.4.24. The nature conservation importance or potential importance of an ecological feature is determined within the following geographic context:

- International;
- National;
- Regional;
- County;
- Local;
- The Site and its immediate environs; and
- Negligible.

8.4.25. A number of resources have been used to determine importance and these are referenced, where relevant, within the baseline results.

8.4.26. This ES has undertaken a detailed assessment of ecological features considered to be 'important' (known as Important Ecological Features (IEFs)). The baseline information and nature conservation evaluation have been used to identify IEFs which can be designated sites for nature conservation, habitats, species, ecosystems, and/or their functions/processes considered to be important and potentially affected by the Proposed Development.

8.4.27. Ecological features that have been identified to be of less than local importance are not considered to be IEFs and as such have not been considered within the impact assessment. Where mitigation is required for these features for legal reasons this is detailed within the mitigation section.

Impact assessment

8.4.28. The assessment of the potential impacts of the Proposed Development takes into account both on-site impacts and those that may occur to adjacent and more distant ecological features.

8.4.29. Where impacts have been identified, details are provided within the assessment to characterise these in terms or their extent and magnitude, duration, frequency and timing, and reversibility. Both positive and negative impacts are discussed. Impacts were also characterised in terms of how they occur, i.e. direct, indirect secondary or cumulative. Impacts can be permanent or temporary and can include:

- Direct loss and degradation of wildlife habitats;

[40] Ratcliffe, D. (1977) A Nature Conservation Review. Cambridge University Press.

- Fragmentation and isolation of habitats;
- Mortality and injury to species;
- Disturbance to species from noise, light or other visual stimuli;
- Changes to key habitat features; and
- Changes to the local hydrology, water quality and/or air quality.

8.4.30. For designated sites for nature conservation, effects are considered significant when a project and associated activities are likely to either undermine or support the conservation objectives or condition of the site(s) and its features of interest.

8.4.31. For habitats, effects are considered significant when a project and associated activities are likely to result in a change in habitat structure and function.

8.4.32. Consideration is given to whether:

- Any processes or key characteristics will be removed or changed;
- There will be an effect on the nature, extent, structure and function of component habitats;
- There is an effect on the average population size and viability of component species; and
- Functions and processes acting outside the formal boundary of a designated site has also been considered, particularly where a site falls within a wider ecosystem e.g., wetland sites.

8.4.33. Some habitats can tolerate a degree of minor changes, such as localised or temporary disturbance or changes in physical conditions, without such changes harming their function or importance. For this ES, ecological effects have been considered in the light of any information available about the capacity of habitats to accommodate change. Significant effects have been determined as being either negative or positive.

8.4.34. The conservation importance of undesignated habitats and species within a defined geographical area (International to Local) has been used in this assessment to determine whether the effects of the proposals are likely to be significant:

- For habitats, conservation status is determined by the sum of the influences acting on the habitat that may affect its extent, structure and functions as well as its distribution and its typical species within a given geographical area; and,
- For species, conservation status is determined by the sum of influences acting on the species concerned that may affect its abundance and distribution within a given geographical area.

8.4.35. When assessing potential impacts on conservation importance, the known or likely background trends and variations in status have been taken into account. The level of ecological resilience or likely level of ecological conditions, that would allow the population of a species or area of habitat to continue to exist at a given level or continue to increase along an existing trend or reduce a decreasing trend, has been estimated where appropriate to do so.

8.4.36. The avoidance, mitigation, compensation and/or enhancement measures described within this ES chapter have been incorporated into the design and operational phasing programme and taken into account in the assessment of the significance of effects. These mitigation measures include those required to achieve the minimum standard of established good practice together with additional measures to further reduce any negative effects of the Proposed Development. The mitigation measures include those required to reduce or avoid the risk of committing legal offences.

8.4.37. In addition to measures required to ameliorate negative effects on IEFs, biodiversity enhancement measures have been identified and will be incorporated into the Proposed Development.

Mitigation hierarchy

8.4.38. The principles of the mitigation hierarchy[41,42] have been adopted and used when considering impacts and subsequent effects on IEFs within the ZoI.

8.4.39. The principles of the mitigation hierarchy are that, in order of preference, impacts on biodiversity should be subject to:

- Avoidance: Seek options that avoid harm to ecological features (for example, by locating on an alternative site);
- Mitigation: Negative effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation; and
- Compensation: Where there are significant residual negative ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.

8.4.40. Additionally, projects are required to provide enhancements which are net benefits for biodiversity over and above the requirements for avoidance, mitigation or compensation. Enhancement measures are provided within Section 8.7.

Assumptions and limitations

8.4.41. Access was not possible to all areas within 50 m of the Site (the Survey Area) predominantly north of the Site due to being under private ownership with no public access. However, this is not considered a significant limitation due to the highly urban nature of the Site which consists predominantly of hardstanding, buildings, and small areas of amenity grassland. Areas not accessed during the survey could be viewed from Site and mapped accordingly. These areas were not considered to support suitable habitats for significant assemblages of protected/priority species and therefore, this is not considered to be a significant limitation.

8.4.42. Several trees were covered by dense ivy which may mean that potential roosting features were obscured. A precautionary approach was therefore taken whereby assuming roosting features are present when assessing suitability, and as such, this is not considered a significant limitation.

8.4.43. The search for waterbodies within 500 m of the Site was undertaken by using Ordnance Survey plans and aerial photographs only. These sources may not show all ponds and or waterbodies within 500 m of the Site and therefore some waterbodies may not have been identified. However, due to the very urban nature of the Site (consisting of predominantly hardstanding) which offers poor suitability for amphibian species and poor connectivity (due to roads/canals), this is not considered to be a significant limitation.

8.4.44. The records from Greater Manchester Local Records Centre are not exhaustive, and the absence of records does not necessarily demonstrate the absence of a species. Where likely absence of a species

[41] Department for Communities and Local Development (2023) National Planning Policy Framework, https://www.gov.uk/government/publications/national-planning-policy-framework--2

[42] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine, Paragraph 1.19. Chartered Institute of Ecology and Environmental Management, Winchester.

cannot be confidently discounted, a precautionary approach has been undertaken whereby the species is assumed to be present unless the results from the field survey and desk study can evidence they are unlikely to be present.

8.4.45. Many cryptic taxa, particularly including apomictic species of plant, invertebrates and fungi, could not be adequately surveyed at the time of the survey. These groups require specialist survey and survey windows are generally highly restrictive, particularly for plants across the genera *Taraxacum, Rubus* and *Hieracium*. However, attributable to the urban nature of the habitats present at the Site and surrounding landscape, this is not considered to be a significant limitation.

8.4.46. Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The ecological surveys undertaken to support this ES have not therefore produced a complete list of plants and animals, and the absence of evidence of any particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future. Where likely absence of a species cannot be confidently discounted, a precautionary approach has been undertaken whereby any species are assumed to be present unless the results from the field survey and desk study can evidence they are unlikely to be present.

Consultation

8.4.47. Consultation has happened with key stakeholders such as Manchester City Council (MCC) and Greater Manchester Ecological Unit (GMEU).

8.4.48. A Scoping Report ES (Volume 4) Appendix 4.1 was submitted to MCC on 30th September 2024 with a formal request for an EIA Scoping Opinion in accordance with Regulation 15 of the EIA Regulations.

8.4.49. A summary of the key points raised in the EIA Scoping Opinion relevant to the Biodiversity chapter are presented in ES (Volume 4) Appendix 4.2, including a response as to where the comments have been addressed within this chapter.

8.5. Baseline conditions

8.5.1. This section provides details of the ecological baseline relevant to the Proposed Development recorded during the desk study and field surveys undertaken. A baseline UKHab Map of the Survey Area, along with TNs, is provided on ES (Volume 5) Figure 8.1 and in ES (Volume 4) Appendix 8.1.

Statutory and non-statutory designated sites

8.5.2. No statutory designated sites for nature conservation are located within 2 km of the Site. Table 8-4 below details the non-statutory designated sites for nature conservation, identified though the desk study, within 1 km of the Site. These are shown on ES (Volume 5) Figure 8.1.

Table 8-4 - Non-statutory designated sites for nature conservation within 1 km of the Site

Site name	Designation	Location of designated site[43]	Features of interest	Importance level
Rochdale Canal Stott's Lane – Ducie Street Basin	Site of Biological Importance (SBI)	Adjacent to the western aspect of the Site	Fw3 – Large Areas of Standing Open Water Aquatic plants. Floating water-plantain *(Luronium natans).* Nine species of pondweed (*Potamogeton* sp.)	County
Ashton Canal (West)	SBI	175 m east of the Site	Fw3 – Large Areas of Standing Open Water Aquatic plants. Floating water-plantain.	County

8.5.3. The two identified SBIs are of county importance due to containing nutrient poor standing water over 1 ha and populations of floating water-plantain as outlined within Greater Manchester Sites of Biological Importance Selection Guidelines (ref: Fw3)[44]. The two SBIs also contain county level important populations of floating water-plantain.

8.5.4. The ZoI for non-statutory designated sites for nature conservation is the Site plus 50 m (for impacts such as noise/vibration and pollution). This includes the Rochdale Canal Stott's Lane – Ducie Street Basin only; this non-statutory designated site for nature conservation has been taken forward for further consideration. The remaining SBI (Ashton Canal (West)) has not been considered further in the assessment due to being more than 50 m from the Site.

Irreplaceable habitats

8.5.5. No irreplaceable habitats (including ancient woodland or ancient or veteran trees) were identified within 2 km of the Site.

8.5.6. Therefore, irreplaceable habitats are not considered further in the assessment.

Priority habitats

8.5.7. Several blocks of priority habitat deciduous woodland are located within 2 km of the Site. The closest is located approximately 650 m east of the Site.

8.5.8. The ZoI for priority habitats is the Site plus 50 m (for impacts such as noise/vibration and pollution). Therefore, priority habitats are not considered further in the assessment.

[43] Where designated sites are situated outside of the Site boundary, the distance and direction is given to the closest point that the designated site is from the Site.

[44] Greater Manchester Sites Of Biological Importance Selection Guidelines (2016) Version 2.0. Available at: https://www.tameside.gov.uk/ecologyunit/sbi/guidelines.pdf [Accessed: 24/01/2024]

Habitats

8.5.9. Habitats are mapped on the UKHab survey plan, ES (Volume 5) Figure 8.1 with specific features highlighted by TNs on the figure. TN descriptions and photographs are provided in ES (Volume 4) Appendix 8.1.

8.5.10. The Site is vacant and predominantly hardstanding with scattered ephemeral vegetation associated with derelict hardstanding areas (such as butterfly-bush, ragwort spp., thistle spp., and willowherb spp.) (TN01 and TN02). The wider Survey Area consists mostly of roads and buildings as well as an area of buildings, roads, and grassland areas immediately north of the Site.

8.5.11. Planted around the Site are a range of native and non-native scattered broad-leaved trees (mostly rowan and false-acacia), ranging from young to mature in age and structure. These are trees planted as part of the previous retail development and are located within bricked planters with dense introduced shrubs (including Wilson's honeysuckle, snowberry, wall cotoneaster, and butterfly-bush).

8.5.12. A line of trees is present on the northern boundary of the Site. This consisted mostly of small-leaved limes with ash, false-acacia, Norway maple, rowan, sycamore, hawthorn, and willow spp.

8.5.13. Further details of the trees are provided in the Arboricultural Impact Assessment, ES (Volume 4) Appendix 8.3.

8.5.14. The Rochdale Canal (which forms part of Rochdale Canal Stott's Lane – Ducie Street Basin SBI) is located directly west of the Site, and the Ashton Canal is approximately 175 m east of the Site. Canals are a local Biodiversity Action Plan (BAP) habitat within Greater Manchester[45].

8.5.15. Table 8-5 below provides a summary description of each habitat within the Survey Area, identifies those habitats which are listed on Annex 1[46] and/or listed as priority habitats[9], and provides a nature conservation importance for each habitat.

[45] https://gmlrc.org/resources/downloads/gm_bap/canals_2003.pdf [Accessed: 24/01/2024]

[46] http://jncc.defra.gov.uk/page-1523 [Accessed: 24/01/2024]

Table 8-5 - Habitat types within the Survey Area

Habitat type	Location of habitat[47]	Area of habitat/ distance of linear feature[48]	Annex 1 habitat Y/N	Priority habitat Y/N	Importance level	Rationale for valuation
Developed land; sealed surface	Within Site and Survey Area	6.19 ha	N	N	Site	Predominantly hardstanding with a single building. Considered to be of negligible ecological value and is abundant in the surrounding area.
Modified grassland	North of the Site within the Survey Area	0.38 ha	N	Y	County	Grassed areas associated with the adjacent marina and part of Cotton Field Park. Urban managed greenspaces are a BAP habitat within Greater Manchester[49].
Other neutral grassland	North of the Site within the Survey Area	0.07 ha	N	Y	County	Grassed areas associated with the adjacent marina and part of Cotton Field Park. Urban managed greenspaces are a BAP habitat within Greater Manchester[50].
Bramble scrub	North of the Site within the Survey Area	<0.01 ha	N	Y	County	Bramble scrub areas associated with the adjacent marina and part of Cotton Field Park. Urban managed greenspaces are a BAP habitat within Greater Manchester[51].
Mixed scrub/Introduced shrub	Within Site	0.20 ha	N	N	Site	Comprised mostly of non-native species (such as wall cotoneaster and Wilson's honeysuckle) which have limited ecological value.
Other broadleaved woodland (Line of trees)	Within Site and Survey Area	184 m	N	N	Site	Comprised of non-native and native species and is a common habitat which is considered to be of limited ecological value.
Canal (Rochdale Canal)	West of Site	0.23 ha	N	Y	County	Includes habitats within Rochdale Canal Stott's Lane – Ducie Street Basin SBI which is of county importance. Canals are a local BAP within Greater Manchester.

8.5.16. The majority of the Site is hardstanding (developed land; sealed surface) and introduced shrub, which is considered to hold nature conservation value at the Site level only. The vegetated habitats within the Site (introduced shrub and other neutral grassland) are considered to be important for nature

[47] Where habitats are situated outside of the Site boundary, the distance and direction is given to the closest point that the habitat from is the Site.

[48] The area of habitat is only provided for those habitats that fall within the Site.

[49] https://gmlrc.org/resources/downloads/gm_bap/urban_managed_greenspace_2003.pdf [Accessed: 24/01/2024]

[50] https://gmlrc.org/resources/downloads/gm_bap/urban_managed_greenspace_2003.pdf [Accessed: 24/01/2024]

[51] https://gmlrc.org/resources/downloads/gm_bap/urban_managed_greenspace_2003.pdf [Accessed: 24/01/2024]

conservation in the context of the Site only; they are not priority habitats and are unlikely to regularly support any assemblage or population of priority species. Therefore, the Proposed Development will have no direct impacts on any habitats of greater than Site level importance within the Site and these habitats have not been considered further in the assessment.

8.5.17. Urban managed greenspaces are a BAP habitat within Greater Manchester[52] which includes managed grasslands. Therefore, the habitats outside of the Site boundary (but within the Survey Area), comprising amenity grassland, other neutral grassland, and bramble scrub are of county value. Therefore, these habitats have collectively been taken forward as 'urban managed greenspace' within the Impact Assessment. The ZoI for habitats is the Site plus 50 m (for impacts such as pollution). As the canal habitat (hereafter referred to as Rochdale Canal) and urban managed greenspace habitats are located within the ZoI and valued at County importance, these habitats have been taken forward for further consideration within the Impact Assessment.

Protected and priority species

8.5.18. This section provides details of the results of the desk study and walkover survey, along with the nature conservation importance for each species or species group.

Badgers

8.5.19. GMBRC provided 14 badger setts records within 1 km of the Site; however, no badger setts or field signs were recorded in, or within 50 m, of the Site.

8.5.20. There was no evidence (including setts or field signs) of badgers during the walkover survey, and the Survey Area did not provide suitable conditions for sett building due to it predominantly consisting of a hardstanding car park lacking areas of loose earth suitable for sett building. The surrounding dense urban area and several waterbodies (including canals) surrounding the Site (and wider area) would indicate that badger presence is unlikely due to poor connectivity and unsuitable habitats.

8.5.21. As no suitable habitat for badger is present within the Survey Area, badgers have not been considered further in the assessment.

Amphibians

8.5.22. GMBRC provided no records of amphibians within 1 km of the Site.

8.5.23. No ponds were identified within 500 m of the Site. Furthermore, habitat connectivity for this species group is considered to be poor due to the Site being bounded by an active canal (with sheer concrete edges) on the western edge, as well as dense urban areas on all sides (including major roads).

8.5.24. As no suitable habitat for amphibians has been identified within the Site, and due to no desk study records being reported, amphibians have not been considered further in the assessment.

Bats

8.5.25. GMBRC provided 70 bat records within 2 km of the Site, including 28 bat roost records. The closest record was a common pipistrelle commuting and foraging record, located approximately 90 m south of

[52] https://gmlrc.org/resources/downloads/gm_bap/urban_managed_greenspace_2003.pdf [Accessed: 24/01/2024]

the Site. The closest bat roost record was for a single common pipistrelle, non-breeding summer roost, located approximately 120 m south of the Site.

8.5.26. The habitats within the Site predominantly comprise hardstanding, with a line of trees, which provide limited suitable habitat for foraging and commuting due to the high amount of artificial lighting of the surroundings, refer to ES (Volume 4) Appendix 2.2 Obtrusive lighting assessment report. The Site is bounded on all sides (including Rochdale Canal) by lampposts providing significant artificial lightings in and around the Site and Survey Area. The waterbodies surrounding the Site (such as Rochdale Canal) likely form part of a foraging area for bat species roosting in the local area and may provide important commuting corridors to the wider landscape. There is suitable foraging, commuting, and potential roosting habitat in the wider surroundings including the canal networks and River Medlock located approximately 500 m east of the Site. Overall, the Site is assessed as providing 'low' habitat suitability[53] as whilst suitable habitat is present, it is limited in extent, and situated within an urban setting with significant artificial lighting reducing the overall suitability for foraging/commuting bats.

8.5.27. Several trees are present within the Site and Survey Area (TN03, TN04, TN05, TN06, TN07, TN08, and TN09). No clear signs of bat roosting suitability were recorded within the trees on Site; however, five trees were covered in dense ivy (TN04, TN05, TN06, and TN08), which may obscure suitable roosting features. Due to the size and age of the trees concerned, these five trees are considered to offer only very limited roosting potential and therefore, on a precautionary basis, have been assigned 'PRF-I' bat roosting suitability. Additionally, due to location of the Site within a heavily urbanised city centre location, the high levels of disturbance (e.g. noise and light), it is considered reasonably unlikely that roosting bats are present on the Site or the wider Survey Area.

8.5.28. A single small brick-built structure (previously used as a site security office) is located within the Site (TN10). The structure was subject to a detailed PRBA survey on 13 September 2022 and updated 30 September 2024. At the time of survey, the single structure was used as an active security office. The building was brick-built with a hipped tiled roof. Wooden soffit boxes were present on all sides with narrow gaps (approximately 2.5 cm wide) leading to larger cavities, however, much of these gaps were covered with dense cobwebs, potentially indicating a lack of use by bats. The tiled roof and brickwork appeared in good condition with no signs of PRFs (such as cracks or gaps in the mortar). Two alarm boxes were present with narrow gaps (approximately 2 cm wide) behind which may be suitable for roosting bats. Gaps (approximately 2 cm wide) were present around the access door of the building; however, this door is in regular use. It was considered that the structure still contained 'low' bat roosting suitability due to the presence of PRFs, predominantly within the wooden soffit boxes. No bats or evidence of bats (such as droppings, staining etc.) were found following the torch and endoscope inspection. All PRF were able to be fully surveyed. Overall, it is considered that whilst the structure holds 'low' bat roosting suitability, all PRFs were able to be fully surveyed during the PBRA with no evidence of bats found, therefore, further surveys are not considered necessary[54].

8.5.29. No bat roosts have been recorded within the Site, and only five trees are present with precautionary PRF-I bat roosting suitability likely suitable for widespread bat species only; therefore, roosting bats are considered to be of importance at the Site level only[55].

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[53] In accordance with Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London

[54] In line with Page 53 (paragraph 5.2.44) of Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition).* The Bat Conservation Trust, London.

[55] In accordance with Table 3.2 of Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.

8.5.30. Due to the presence of lighting and disturbance within the Site and poor surrounding habitat, the only bat species anticipated to be regularly present within the locality are those that are widespread, and tolerant of the urban environmental such as common or soprano pipistrelle. Due to the limited suitable foraging and commuting habitat within the Site, it is considered that foraging/commuting habitat within the Site is of importance at the Site level only.

8.5.31. As bats within the Site are considered to be at importance at the Site level only, they have not been considered further in this assessment.

Birds

8.5.32. Sixty-five priority bird species records were provided by GMBRC within 1 km of the Site. This included three species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended): black redstart, little ringed plover, and peregrine. No records of nesting birds were provided from within the Site. Blackcap, dunnock, song thrust, blackbird, woodpigeon, and Canada goose were recorded during the field visit.

8.5.33. There was limited vegetation within the Site which was constricted to predominantly areas of hardstanding with smaller areas of introduced shrub, scattered urban trees, and line of trees. The scattered urban trees on the southern boundary and line of trees on the norther boundary may provide suitable nesting opportunities for several species of widespread bird species associated with urban habitats. No active nests were identified during the walkover survey; however, nests may have been obscured by dense vegetation.

8.5.34. There was a lack of loose or bare earth, gravel, significant areas of ephemeral vegetation, freshwater habitats (such as ponds), or buildings, that could support specialist bird species, such as little ringed plover or black redstart. Therefore, the Site is not considered to provide suitable nesting habitat for any priority bird species (such as those listed on Schedule 1 of the WCA).

8.5.35. Given the nature of the works and the potential for birds to use the habitats present within the Site, the ZoI for birds is considered to be the Site plus 50 m (taking into account potential noise and vibration impacts).

8.5.36. Due to the presence of limited suitable nesting habitat (for widespread urban bird species), it is considered that the Site is of importance at the Site level only for breeding birds. Therefore, they have not been considered further in this assessment.

Widespread species of reptiles

8.5.37. GMBRC provided no records of reptiles within 1 km of the Site.

8.5.38. The habitats within the Site predominantly consisted of hardstanding with limited habitat features suitable for reptiles (such as log or rubble piles). Furthermore, the Site is poorly connected to the surrounding for reptiles due to being surrounded by a canal on the western boundary and dense urban roads on the south, east, and northern boundaries. Furthermore, the Site has been subject to previous disturbance through previously being a retail park and car park (and subsequent demolition), and recently, a large car park. Due to this, it is considered highly unlikely that reptiles would be present within the Site.

8.5.39. As no suitable habitat for reptiles has been identified within the Site, and due to no desk study records being reported, reptiles have not been considered further in this assessment.

Otter and water vole

8.5.40. GMBRC provided no records of otter or water vole.

8.5.41. The Site is bounded by a canal (Rochdale Canal) on the western boundary (TN11 and TN12). This waterbody was considered to provide unsuitable breeding and resting opportunities for otter and water vole due to its sheer concrete bank edges and lack of bankside vegetation. However, it is likely that both species could occasionally use this waterbody for commuting and foraging purposes.

8.5.42. Connectivity between Rochdale Canal and the Site is poor (for otters and water vole) due to the presence of walled and fenced boundaries surrounding the Site on the western boundary. Furthermore, the Site itself does not contain suitable habitat for otters and water vole due to being predominantly hardstanding and introduced shrubs.

8.5.43. Overall there is no suitable habitat within the Site (such as waterbodies/watercourses), and the adjacent waterbody (Rochdale Canal) within the Survey Area is likely suitable for commuting/foraging otters and water voles only.

8.5.44. Otters are generally considered to be likely absent within Greater Manchester with no confirmed breeding territories, however, re-colonisation is considered likely[56] with unconfirmed recent incidental sightings[57]. Water vole populations are widespread and locally common in Greater Manchester, although populations are often fragmented and susceptible to local extinctions[58]. Water voles have been recorded within Rochdale Canal Stott's Lane – Ducie Street Basin SBI according to the SBI citation, however, no information on exact locations has been provided.

8.5.45. On a precautionary basis, and lack of detailed survey information, foraging/commuting otters and water voles are considered present within Rochdale Canal adjacent to the western boundary of the Site. Due to the lack of breeding/resting habitat for these species and the sub-optimal foraging/commuting habitat, it is likely that only low numbers of these species could be present adjacent to the Site. Therefore, otters and water voles are likely to be of importance at the Site level only. Due to this, these species have not been considered further in this assessment.

Priority invertebrates

8.5.46. GMBRC provided two records of priority invertebrates including cinnabar moth and white letter hairstreak within 1 km of the Site. No records of white-clawed crayfish and freshwater pearl mussel were returned.

8.5.47. The Site is bounded by Rochdale Canal on the western boundary. This waterbody was considered to provide unsuitable habitat for white-clawed crayfish and freshwater pearl mussel. Both species require clean, flowing, watercourses with pebble/gravel substrate. Rochdale Canal has limited flow, was turbid, and generally unsuitable for these species.

8.5.48. The Site contained predominantly hardstanding with very limited areas of vegetation or habitats that would provide suitability for priority invertebrates.

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[56] Page 62 of the Greater Manchester Sites Of Biological Importance Selection Guidelines (2016) Version 2.0. Available at: https://www.tameside.gov.uk/ecologyunit/sbi/guidelines.pdf [Accessed: 24/01/2024]

[57] Otters spotted in Greater Manchester's rivers after years of declining numbers - Manchester Evening News

[58] https://gmlrc.org/resources/downloads/gm_bap/wate_voles_2009.pdf [Accessed: 24/01/2024]

8.5.49. As no suitable habitat for priority invertebrates is present within the Site or Survey Area, they have not been considered further in this assessment.

Priority plants/fungi

8.5.50. GMBRC provided two records of bee orchid (approximately 65 m south)

8.5.51. The Site contained predominantly hardstanding with very limited areas of vegetation or habitats that would provide suitability for priority plant and fungi species.

8.5.52. As no suitable habitat for priority plants/fungi is present within the Site, they have not been considered further in this assessment.

Other priority mammal species

8.5.53. GMBRC provided two records of hedgehog within 1 km of the Site. No other records of priority mammal species were returned.

8.5.54. The walkover survey found there to be limited suitable habitat for priority mammal species (including hedgehog) within the Survey Area. Connectivity between the Site and surrounding area is poor for ground based terrestrial mammals due to the presence of walled boundaries and several major roads.

8.5.55. Due to the lack of any suitable habitat for priority mammal species (including hedgehog) recorded within the Survey Area, and the poor connectivity from the Site (including brick walls) to suitable habitat, priority mammal species they have not been considered further in this assessment.

Non-native invasive plant species

8.5.56. No records of invasive non-native plant species (INNPS) were provided by GMBRC.

8.5.57. During the walkover survey, wall cotoneaster[59] (TN13, TN14, TN15, and TN16) was recorded within the surrounding perimeter vegetation within introduced shrub.

8.5.58. Butterfly-bush was recorded throughout the Survey Area. Whilst this species is not listed[60] as an INNPS, it is a species that spreads quickly and may damage or weaken masonry.

Summary

8.5.59. Table 8-6 below provides a summary of the features of nature conservation importance which are considered within the impact assessment. The table also provides details of the ZoI for the features.

8.5.60. The habitats within the Site have been valued at less than local importance and are not considered to be IEFs. As such, they are not discussed further within this assessment.

[59] Listed upon Schedule 9 of the Wildlife and Countryside Act 1981 (As amended)

[60] Upon Schedule 9 of the Wildlife and Countryside Act 1981 (As amended)

8.5.61. The following features that have been valued at less than local importance are not considered to be IEFs and as such as not discussed within the impact assessment. However, due to legal considerations, mitigation is required. Mitigation has therefore been developed for legal reasons for:

- Breeding birds
- Bats

8.5.62. The following features have also not been considered further in the impact assessment, the rational for which is discussed in the relevant sections above:

- Ashton Canal West SBI
- Irreplaceable habitats (including ancient woodland)
- Habitats (including priority habitats, developed land; sealed surface, line of trees, and introduced shrub)
- Otter
- Water vole
- Priority plants
- Badger
- Amphibians
- Reptiles
- Other priority mammal species (such as hedgehog)
- Priority invertebrates (including white-clawed crayfish and freshwater pearl mussel)

Table 8-6 - Determination of importance of ecological features and details of their zone of influence

Ecological feature	Summary of baseline	Maximum zone of influence[61]	Importance level	Rationale for valuation
Rochdale Canal Stott's Lane – Ducie Street Basin SBI	Non-statutory designated site for nature conservation located directly west of the Site.	50 m – due to potential impacts from dust and water pollution.	County	Locally designated site for aquatic plants floating water-plantain *(Luronium natans)* and nine species of pondweed (*Potamogeton sp.*).
Canals (Rochdale Canal)	Waterbody forming part of Rochdale Canal Stott's Lane – Ducie Street Basin SBI.	50 m – due to potential impacts from dust and water pollution.	County	Canals are included as a local BAP within Greater Manchester.
Urban managed greenspace	Grassland and scrub habitats which are an area of urban managed greenspace part of Cotton Field Park.	50 m – due to potential impacts from ground pollution.	County	Urban managed greenspaces are included as a local BAP within Greater Manchester.

[61] The zone of influence may be different for the construction and operational phases. The maximum zone of influence is given here. Where there are differences between the construction and operational zones of influence these are discussed within the impact assessment.

8.6. Potential impacts

Construction phase

8.6.1. Rochdale Canal Stott's Lane – Ducie Street Basin SBI and Rochdale Canal could be affected by the Proposed Development without mitigation as a result of dust and/or water pollution during construction. This could arise from accidental pollution (such as from machinery during construction) events or from surface run off into the SBI/canal.

8.6.2. Urban managed greenspaces (located adjacent to the norther boundary of the Site) could be affected by the Proposed Development without mitigation as a result of ground pollution during construction. This could arise from accidental pollution events from machinery during construction.

Operation phase

8.6.3. No impacts are anticipated during the operational phase of the Proposed Development.

8.7. Assessment of effects

Construction phase

Embedded mitigation

8.7.1. The following embedded mitigation measures will be implemented during the construction phase of the Proposed Development:

- Guidance for Pollution Prevention (GPPs) guidelines[62] and the Construction Industry Research and Information Association (CIRIA) guidance on the control of water pollution from construction sites[63] will be followed at all times.
- Dust control best practice guidelines[64] will be followed during any ground-breaking works.
- If any protected species or evidence of protected species, or any INNPS, are unexpectedly encountered at any point during the works, all works will cease, and an ecologist will be contacted for further advice on how to proceed.
- The Proposed Development will include landscape planting that includes the planting of 73 native trees, and 0.20 ha of shrub planting. The habitats within the baseline currently provide limited ecological value (predominantly hardstanding and shrubs).
- A variety of integrated bird nesting boxes will be installed within suitable locations throughout the Proposed Development, targeting urban bird species that are locally present and listed as local

[62] The GPPs provide environmental good practice guidance for the whole UK, and environmental regulatory guidance directly to Northern Ireland, Scotland and Wales only. For businesses in England, regulatory guidance is available from GOV.UK instead.

[63] The CIRIA documents are a series of publications developed by the Construction Industry Research and Information Association. Each document is targeted at a particular type of business or activity and covers environmental good practice to minimise pollution. CIRIA C762 Environmental good practice provides advice on the management of a range of environmental issues that may be encountered on site and presents good practice to reduce the environmental impacts due to construction

[64] Holman et al (2014). IAQM Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London. www.iaqm.co.uk/text/guidance/construction-dust-2014.pdf

priority species[65]. The integrated bird boxes will target species locally present, as provided by GMBRC: swift, song thrush, black redstart, house sparrows, and starlings. Models will include: 2HW Schwegler, WoodStone Swift Nest Box, 1B Schwegler Nest Box, 1SP Schwegler Sparrow Terrace, and 16S Schwegler Swift Box. This, in combination with the tree planting, will increase the bird nesting opportunities within the Site beyond their current levels and further increase the ecological value of the Site.

- A variety of integrated bat boxes will be installed within suitable locations throughout the Proposed Development, including boxes suitable for day roosts, maternity, and hibernation. Models will include 1FF Schwegler Bat Box, 2F Schwegler Bat Box, and 1FW Bat Hibernation Box. This will increase the suitability for bats beyond the Sites current limited levels.
- The stands of wall cotoneaster (INNPS) within the Site (located within the planters on the southern boundary) will be eradicated prior to any works commencing to avoid the spread of this species during construction.

8.7.2. The following additional standard mitigation measures will be implemented during the construction stage of the Proposed Development. These measures are not to avoid significant effects on the identified IEFs; however, they are included as either standard best practice, as pure ecological or landscape enhancements, or for legal reasons:

- Prior to construction, a suitably qualified Ecological Clerk of Works (ECoW) will be employed for the duration of construction of the Proposed Development and for pre-construction clearance works.
- The retained trees adjacent to the Site, will be protected in line with guidelines provided in BS 5837 Trees in relation to Construction[66].
- Any excavations will be filled or covered overnight to prevent animals (such as fox) becoming entrapped. Where excavations cannot be filled or covered overnight, a plank of wood (or similar) will be placed into the excavation at an angle that allows means of escape.
- Vegetation removal is currently scheduled for 2025. Therefore, vegetation removal may be scheduled within the core bird nesting season (the nesting season is 1 March to 31 August, though it should be noted that variation in dates is possible, for example from geographical variations in climate, or due to a particularly mild winter). In order to avoid damage or destruction of occupied nests or harm to breeding birds, works within the core bird nesting season will require an inspection of vegetation to be cleared for breeding birds and their occupied nests by a suitably qualified ecologist no more than 24 hours prior to any works being undertaken. If any nesting birds are identified during the survey, they will be left in situ for their entire nesting period and alternative approaches to the work proposed. This may include leaving an exclusion zone around the nests to avoid disturbance.
- The trees with a precautionary PRF-I bat roost suitability and the structure on Site will be soft felled, where tree limbs and PRFs are cut/removed in sections under the guidance of the ECoW. These measures will be incorporated into the Construction Environmental Management Plan.

Construction effects

8.7.3. Following the implementation of the aforementioned mitigation, no significant effects are anticipated during construction on the identified IEFs (Rochdale Canal Stott's Lane – Ducie Street Basin SBI, Rochdale Canal, and managed urban greenspaces), through pollution events/incidents.

[65] https://www.gmwildlife.org.uk/resources/downloads/gm_bap/urban_managed_greenspace_2003.pdf

Operation phase

Embedded mitigation

8.7.4. No embedded mitigation measures are proposed.

Operation effects

8.7.5. No effects are anticipated during operation.

8.8. Additional mitigation and enhancement measures

8.8.1. No additional mitigation measures are required following the embedded mitigation measures.

8.9. Residual effects

Construction

8.9.1. No significant or non-significant residual effects are anticipated as a result of the construction of the Proposed Development after mitigation measures have been implemented.

Operation

8.9.2. No significant or non-significant residual effects are anticipated as a result of the operation of the Proposed Development after mitigation measures have been implemented.

8.10. Cumulative effects

This section considers the cumulative effects of the Proposed Development (intra-Scheme cumulative effects) and the Proposed Development interacting with other RFFPs (inter-project cumulative effects) from the perspective of impacts within the scope of the biodiversity topic.

Cumulative effects assessment

The further consideration of cross-topic intra-Scheme and inter-project cumulative effects is reported in Chapter 22: Cumulative Effects.

Intra-project in-combination cumulative effects assessment (single project impacts) within topic

8.10.1. The focus of intra-project CEA is understanding how receptors may experience a number of different types of impacts from the Proposed Development at the same time. Within this topic assessment, the biodiversity assessment methodology inherently includes consideration of all the different types of

impacts for each biodiversity resource, and takes them all into account to give a single level of impact for each resource.

8.10.2. This assessment has identified that there are potential adverse impacts upon Rochdale Canal Stott's Lane – Ducie Street Basin SBI, Rochdale Canal, and managed urban greenspace habitats; however, it is considered unlikely, that following the implementation of the mitigation measures, that there would be any significant minor residual effects associated with the Proposed Development. Therefore, it is considered that no significant contribution to a cumulative effect is likely, irrespective of what other reports may contribute.

Inter-project cumulative effects assessment (different project impacts) within topic

8.10.3. The inter-project cumulative effects assessment 'within topic' element for the biodiversity assessment has been completed with reference to the shortlist list of RFFPs that has been developed for the Proposed Development. The list is based on a review of all developments known to the planning system using the methodology described in Chapter 22: Cumulative Effects.

8.10.4. The RFFP short list has been screened to identify projects that are considered to have a realistic prospect of interacting with the Proposed Development in relation to the identified IEFs. The sift from the short-list to identify RFFPs that should be scoped into the inter-project CEA for biodiversity took into consideration:

- Scale and type of the RFFP.
- Distance of the RFFP from the Proposed Development.

8.10.5. This process identified potential for inter-project impacts as a result of the Proposed Development in combination with the RFFPs. These RFFPs are:

- 128191/FO/2020 - Development comprising of five office buildings with flexible ground floor use at land between Ashton Canal and Pollard Street.
- 132574/FO/2021 - Development comprising four townhouses at Paradise Wharf.
- 126608/FO/2020 - Development of 66 residential units between Store Street and Ashton Canal.
- 135662/FO/2022 - Development of 154 Bedroom Hotel with ancillary café / bar / restaurant and gym adjacent to Great Ancoats Street and south of Laystall Street.
- 135675/FO/2022 - Development of two apartment buildings comprising 267 dwellings at Tariff Street.
- 137346/FO/2023 - Mixed use development comprising commercial floorspace and 256 residential units adjacent to Poland Street and between Naval Street and Jersey Street.
- 122598/FO/2019 - Mixed use development comprising 94 residential units consisting of townhouses and apartments as well as commercial floorspace at New Islington Marina.
- 128911/FO/2020 - Mixed use development consisting of office space and 89 residential units at Laystall Street.

Potential inter-project impacts

8.10.6. An assessment has been undertaken of the Reasonably Foreseeable Future Projects (RFFP). Due to the limited ecological value of the Site, and the proposed mitigation measures, it is considered unlikely that there would be any cumulative effects due to the lack of significant residual effects.

Mitigation measures

8.10.7. As there are no additional intra-project or inter-project effects identified, there is no additional mitigation required.

Summary of Cumulative Effects

8.10.8. There are no additional intra-project or inter-project effects identified.

8.11. Summary and conclusions

8.11.1. An ecological walkover survey and PBRA survey for bats have been undertaken for the Proposed Development. Several features have not been considered further in the assessment, such as breeding birds, bats, otter, water vole, badger, amphibians, reptiles, hedgehogs, and the habitats present within the Site, due to being valued at less than local importance; therefore, they are not considered IEFs. Rochdale Canal Stott's Lane – Ducie Street Basin SBI, Rochdale Canal, and managed urban greenspace habitats could be impacted by the Proposed Development as a result of pollution (such as dust, water, and ground pollution), and were therefore, taken forward within this assessment.

8.11.2. The above baseline was drawn following a desk study, initial site walkover, and PBRA survey for bats. Consultation with the GMEU concluded that they were satisfied with the scope of ecological surveys within the Environment Scoping Report.

8.11.3. General standard mitigation relating to pollution prevention (dust, water, and ground) will be adhered to during construction in order to ensure there will be no adverse impacts upon the adjacent SBIs and canal habitat. Additional measures will include tree planting and soft landscaping, installation of bird and bat boxes, an appointed ECoW for the duration of the works, the covering of excavations to prevent entrapment, removal of INNPS prior to works commencing, removal of vegetation outside of the nesting bird season, and soft felling of trees.

8.11.4. No cumulative effects are anticipated as a result of the Proposed Development during construction or operation. No significant residual impacts are anticipated from the construction or operation of the Proposed Development following the outlined mitigation.

8.11.5. There are no anticipated significant issues as a result of the Proposed Development.

Table 8-7 - Summary of effects

Resource/Receptor/affected group	Sensitivity of receptor	Activity or impact	Embedded design mitigation	Effect Magnitude Type Spatial extent Duration Likelihood	Significance of effect	Additional mitigation	Residual effect
Construction							
Rochdale Canal Stott's Lane – Ducie Street Basin SBI And Rochdale Canal	County value (medium importance)	Impact from pollution events	Adherence to standard pollution prevention measures.	Adverse Minor Direct Local Temporary Unlikely	No significant effects	N/A	No residual effects
Managed urban greenspace (habitats as part of Cotton Field Park)	County value (medium importance)	Impact from pollution events	Adherence to standard pollution prevention measures.	Adverse Minor Direct Local Temporary Unlikely	No significant effects	N/A	No residual effects

8.12. Glossary and acronyms

Table 8-8 - Glossary and acronyms

Term	Definition
BNG	Biodiversity Net Gain (BNG) is a specific, quantifiable outcome from project activities that deliver demonstrable benefits for biodiversity compared to the baseline situation
CEcol	Chartered Ecologist
CIEEM	Chartered Institute of Ecology and Environmental Management
ZoI	The zone of influence is an area within which ecological features may be subject to biophysical changes as a result of the Proposed Development.
FISC	Field Identification Skills Certificate
GMLRC	The Greater Manchester Local Records Centre is the local biological records centre.
INNPS	Invasive non-native plant species
IRZ	The Impact Risk Zones are a tool developed by Natural England to make a rapid initial assessment of the potential risks posed by development proposals to: Sites of Special Scientific Interest.
NPPF	National Planning Policy Framework
PRF	Potential roosting feature (for bats)
SAC	Special Area of Conservation
SBI	Site of Biological Importance
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
TN	Target Note
UKHab	The UK Habitat Classification (UKHab) is a comprehensive habitat classification system that is recommended for use within the Statutory Metric. It is the classification system that the metric predominantly uses for area-based habitat features.

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